

## WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

## Machine Id

## 24E2003 PCMO-940

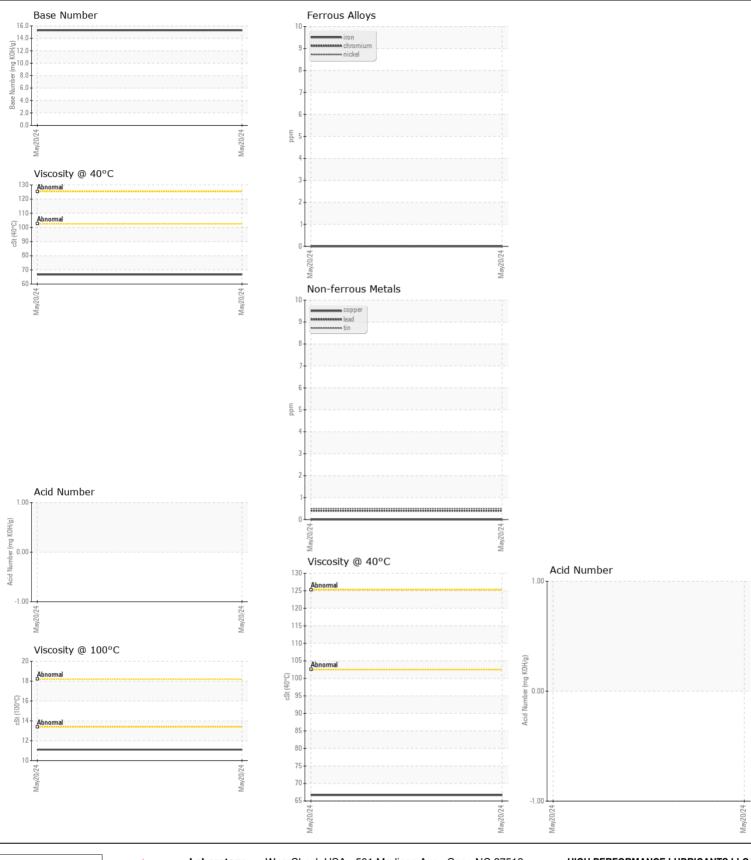
## Component New (Unused) Oil

Gasoline Engine Oil (--- GAL)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
This is a baseline read-out on the submitted sample. ( Customer Sample Comment: RUN TBN )	Sample Number		Client Info		HPL0004931		
	Sample Date		Client Info		20 May 2024		
	Machine Age	hrs	Client Info		0		
	Oil Age	hrs	Client Info		0		
	Filter Age	hrs	Client Info		0		
	Oil Changed		Client Info		Not Changd		
	Filter Changed		Client Info		N/A		
	Sample Status				NORMAL		
WEAR	Iron	ppm	ASTM D5185m		0		
	Chromium	ppm	ASTM D5185m		0		
	Nickel	ppm	ASTM D5185m		0		
	Titanium	ppm	ASTM D5185m		1		
	Silver	ppm	ASTM D5185m		0		
	Aluminum	ppm	ASTM D5185m		11		
	Lead	ppm	ASTM D5185m		<1		
	Copper	ppm	ASTM D5185m		0		
	Tin	ppm	ASTM D5185m		<1		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Ciliana				10		
	Silicon	ppm	ASTM D5185m	00	19		
	Potassium Water	ppm	ASTM D5185m WC Method	>20	2 NEG		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual		NEG		
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		2		
	Boron	ppm	ASTM D5185m		26		
	Barium	ppm	ASTM D5185m		2		
	Molybdenum	ppm	ASTM D5185m		775		
	Manganese	ppm	ASTM D5185m		<1		
	Magnesium	ppm	ASTM D5185m		1897		
	Calcium	ppm	ASTM D5185m		1188		
	Phosphorus	ppm	ASTM D5185m		756		
	Zinc	ppm	ASTM D5185m		835		
	Sulfur Base Number (BN)	ppm	ASTM D5185m		8629 15 20		
	Base Number (BN)		ASTM D2896 ASTM D445		15.29		
	Visc @ 40°C	cSt			66.67		
	Visc @ 100°C	cSt	ASTM D445		11.11		

Viscosity Index (VI) Scale ASTM D2270

159



HIGH PERFORMANCE LUBRICANTS LLC Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. Received 500 S SPRUCE ST : HPL0004931 : 28 May 2024 Lab Number : 06192679 MANTENO, IL Tested : 30 May 2024 : 30 May 2024 - Doug Bogart US 60950 Unique Number : 11049431 Diagnosed Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI) Contact: DAVID WARD Certificate L2367 sampledata@hplubricants.com To discuss this sample report, contact Customer Service at 1-800-237-1369. \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (815)468-3535 F: x: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)